Patent claims

1. A respiratory mask with a mask body (2) and an exhalation system, characterized in that the exhalation system comprises a large number of membrane elements (8, 14, 15, 17, 20) which are disposed on the mask body (2) and through which the expired air can flow.

2. The respiratory mask as claimed in claim 1, characterized in that the membrane elements are designed as flow channels (16) delimited by membrane strips (14, 15).

3. The respiratory mask as claimed in claim 2, characterized in that the flow channels (16) are arranged in a matrix pattern on the mask body (2).

4. The respiratory mask as claimed in claim 1, characterized in that the membrane elements are designed as parallel membrane films (17) which are provided with openings (18).

5. The respiratory mask as claimed in claim 4, characterized in that the membrane films are connected to one another in the form of a multilayer woven fabric.

6. The respiratory mask as claimed in claim 1, characterized in that the membrane elements (8) are designed in the form of bendable bars secured at one end.

7. The respiratory mask as claimed in claim 6, characterized in that the securing positions (12) lie in the overlap area of the membrane elements (8).

8. The respiratory mask as claimed in one of claims 1 through 7, characterized in that the membrane material is composed of a textile fabric or an elastomer.

9. The respiratory mask as claimed in one of claims 1-8, characterized in that the membrane material is selected from a group of materials which change their geometry as a result of electric fields.

10. The respiratory mask as claimed in one of claims 1 through 9, characterized in that the membrane material is selected from a group of materials which change their spring rigidity as a result of electric fields.

11. The respiratory mask as claimed in claim 9 or 10, characterized in that the material is a PVDF film.

12. Use of a material which, as a result of electric fields, changes its geometry or spring rigidity in the region of the exhalation system of a protective respiratory mask as a flow resistance element for influencing the flow of expired air.